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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,553	09/21/2000	Yasuhiko Nomura	001222	7592

23850 7590 03/05/2002

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EXAMINER

LEUNG, QUYEN PHAN

ART UNIT PAPER NUMBER

2828

DATE MAILED: 03/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/666,553

Applicant(s)

NOMURA ET AL.

Examiner

Quyen P. Leung

Art Unit

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– Th MAILING DATE f this communication appears n the cover sheet with th correspondence address –  
Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Pri rity under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

Claims 1-20 are pending.

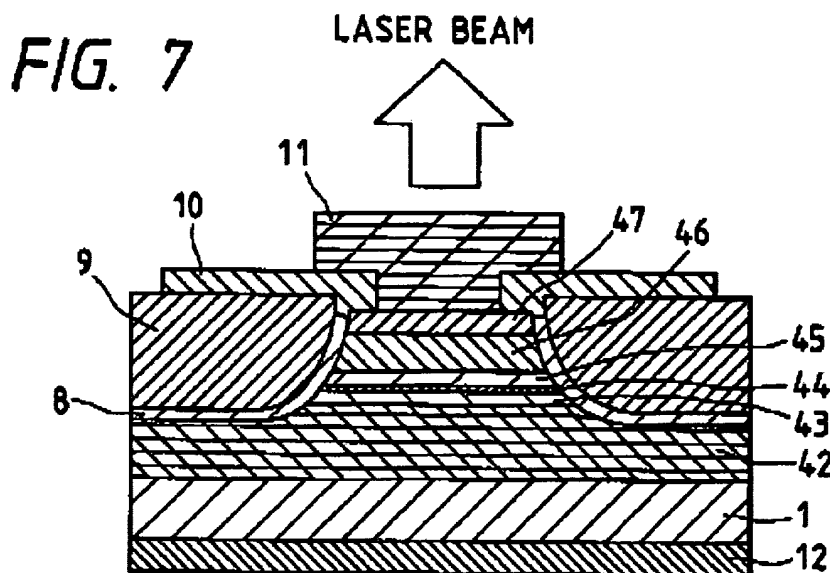
#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

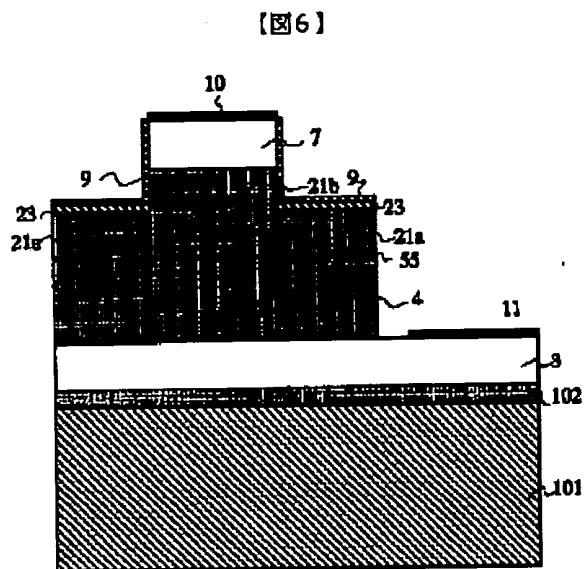
2. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kondow et al (5,912,913). Kondow et al discloses the claimed invention. Note figure 7 which



illustrates a nitride-based semiconductor laser comprising a dielectric film 11, the

dielectric film 11 containing an oxide and a nitride (see col. 11 lines 57-63 and col. 7 lines 35-62).

3. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Inoguchi et al (JP 09-289358). Inoguchi et al discloses the claimed invention. Figure 6 illustrates the claimed invention. Note the dielectric layer 9 on the flat portion of the cladding layer 21a and the side surface of the ridge portion 21b.



### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondow et al (5,912,913) as applied to claims 1-10 above, and further in view of Shieh et al (5,838,705). Kondow et al has been discussed above except for a dielectric film containing nitrogen and oxygen instead of just oxygen. Shieh et al shows that a dielectric film containing nitrogen and oxygen (oxynitride) is an equivalent structure known in the art. See Shieh et al col. 4 lines 28-37. Therefore, because these two dielectric materials were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a dielectric film containing nitrogen and oxygen for that containing just oxygen.

6. Claims 1, 14-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoguchi (JP 09-289358) as applied to claim 17 above, and further in view of Shieh et al (5,838,705). Inoguchi has been discussed above except for a dielectric film 9 containing nitrogen and oxygen instead of just oxygen. Shieh et al shows that a dielectric film containing nitrogen and oxygen (oxynitride) is an equivalent structure known in the art. See Shieh et al col. 4 lines 28-37. Therefore, because these two dielectric materials were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a dielectric film containing nitrogen and oxygen for that containing just oxygen.

### ***Conclusion***

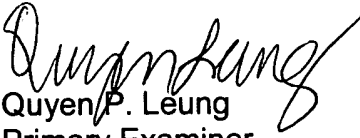
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fujii (5,742,728) teaches a short wavelength laser emitting diode and Koga (5,727,008) teaches a semiconductor light emitting device.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quyen P. Leung whose telephone number is (703) 308-0545. The examiner can normally be reached on 8:30-5:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
Quyen P. Leung  
Primary Examiner  
Art Unit 2828

QPL  
March 1, 2002